

What is claimed is:

1 1. Apparatus for rotatably holding a paper supply roll, having a cylindrical
2 peripheral surface and a hollow cylindrical core, within a printer, wherein the
3 apparatus comprises:

4 a lower support surface for engaging the peripheral surface of the paper
5 supply roll;

6 a cavity for holding the paper supply roll, extending within the printer
7 above the lower support surface;

8 a pair of spaced-apart side plates disposed within the cavity, wherein each
9 of the side plates includes a mounting structure;

10 a bearing member held within each of the mounting structures, wherein
11 the bearing members are held in axial alignment with one another, wherein each
12 of the bearing members includes a tapered surface for engaging the hollow
13 cylindrical core, wherein each of the bearing members is mounted to be moved
14 between an inward position having the tapered surface of the bearing member
15 disposed within the space between the side plates and an outward position
16 having the tapered surface of the bearing member held out of the space between
17 the side plates, and wherein each of the bearing members is held in the inward
18 position and in the outward position.

1 2. The apparatus of claim 1, wherein said tapered surface includes a portion
2 of a sphere.

3
4 3. The apparatus of claim 1, wherein each said mounting structure includes a
5 spring pushing said bearing member inward.

1 4. The apparatus of claim 1, additionally comprising a pivoting structure
2 including said pair of spaced-apart side plates, wherein said pivoting structure is
3 opened to load said paper supply roll into said apparatus and closed to print on a

4 paper web from said paper supply roll.

1 5. The apparatus of claim 1, wherein
2 each of said bearing members includes a flat surface opposite said
3 tapered surface, and
4 each said bearing member is held within said mounting structure in said
5 inward position, with said tapered surface facing inward, and in said outward
6 position, with said tapered surface facing outward.

1 6. The apparatus of claim 5, wherein
2 each said bearing member includes parallel slots extending along opposite
3 sides of said bearing member and a hole extending through said bearing
4 member between said parallel slots, and
5 each said mounting structure is formed as a wire spring, pushing said
6 bearing member inward, including a pair of legs extending within the slots at
7 each side of said bearing member and an end portion extending from each of the
8 legs within the hole extending through said bearing member.

1 7. The apparatus of claim 6, wherein said mounting structure additionally
2 includes a U-shaped portion with an open end extending from an end of each of
3 said legs extending within the slots at each side of said bearing member.

1 8. The apparatus of claim 7, additionally comprising a pair of hook-shaped
2 structures holding each said mounting structure against opposite sides of said
3 bearing member and holding said mounting structure to push said bearing
4 member inward.

1 9. The apparatus of claim 1, wherein said bearing member is held in said
2 mounting structure in said inward position, with said tapered section facing
3 inward within said space between said side plates, and in said outward position,

4 with said tapered section facing inward outside said space between said side
5 plates.

1 10 The apparatus of claim 9, wherein

2 each said mounting structure includes a tubular portion extending outward
3 from one of said side plates, including a slot extending inward,

4 each of said bearing members is pivotably and slidably mounted within the
5 tubular portion, and

6 each of said bearing members includes a shoulder having a tab extending
7 inward within the slot of the tubular portion with said bearing member in said
8 inward position,

9 the tab is held against an outer surface of the tubular portion with said
10 bearing member in said outward position.

1 11. The apparatus of claim 10, additionally including a pair of springs, wherein
2 each of said springs pushes one of said bearing members inward.

1 12. The apparatus of claim 10, wherein each said bearing structure
2 additionally includes a lever for rotating said bearing structure within said
3 mounting structure between said inward and outward positions.

1 13. Apparatus for rotatably holding an end of a paper supply roll, having a
2 cylindrical peripheral surface and a hollow cylindrical core, within a printer,
3 wherein the apparatus comprises

4 a bearing member including a tapered surface for engaging the hollow
5 cylindrical core and a flat surface opposite said tapered surface; and

6 a side plate including a mounting structure holding the bearing member in
7 an inward position with the tapered surface facing in an inward direction to
8 engage the hollow cylindrical core and in an outward position, with the tapered
9 surface facing opposite the inward direction.

1 14. The apparatus of claim 13, wherein said tapered surface includes a
2 portion of a sphere.

1 15. The apparatus of claim 13, wherein
2 said bearing member includes parallel slots extending along opposite
3 sides of said bearing member and a hole extending through said bearing
4 member between said parallel slots, and

5 said mounting structure is formed as a wire spring, pushing said bearing
6 member inward, including a pair of legs extending within the slots at each side of
7 said bearing member and an end portion extending from each of the legs within
8 the hole extending through said bearing member.

1 16. The apparatus of claim 15, wherein said mounting structure additionally
2 includes a U-shaped portion with an open end extending from an end of each of
3 said legs extending within the slots at each side of said bearing member.

1 17. The apparatus of claim 16, additionally comprising a pair of hook-shaped
2 structures holding each said mounting structure against opposite sides of said
3 bearing member and holding said mounting structure to push said bearing
4 member inward.

1 18. Apparatus for rotatably holding an end of a paper supply roll, having a
2 cylindrical peripheral surface and a hollow cylindrical core, within a printer,
3 wherein the apparatus comprises

4 a bearing member including a tapered surface for engaging the hollow
5 cylindrical core; and

6 a side plate including a mounting structure holding said bearing member in
7 an inward position with the tapered surface engaging the hollow cylindrical core
8 and in an outward position, with said tapered surface held out of engagement

9 with the hollow cylindrical core.

1 19. The apparatus of claim 18, wherein said tapered surface includes a
2 portion of a sphere.

1 20 The apparatus of claim 18, wherein
2 said mounting structure includes a tubular portion extending outward from
3 one of said side plates, including a slot extending inward,
4 said bearing member is pivotably and slidably mounted within said tubular
5 portion, and
6 said bearing member includes a shoulder having a tab extending inward
7 within the slot of the tubular portion with said bearing member in said inward
8 position,
9 the tab is held against an outer surface of the tubular portion with said
10 bearing member in said outward position.

1 21. The apparatus of claim 18, additionally comprising a spring pushing said
2 bearing member inward.

1 22. The apparatus of claim 18, wherein said bearing structure additionally
2 includes a lever for rotating said bearing structure within said mounting structure
3 between said inward and outward positions.